

*A Sponge on Hyalonema.* By Dr. J. E. GRAY, F.R.S. &c.

Mr. Tennant kindly brought to the Museum a very fine thick specimen of the Japanese glassrope (*Hyalonema*) with a small quantity of bark on it, and a triangular fan-shaped specimen of a true fibrous sponge on the smaller end of it, which I considered a very interesting specimen, as showing that a true fibrous sponge, as well as the friable sponge forming the genus *Carteria*, was found parasitic on the apex of this sponge.

Dr. Günther, on looking at the specimen, was suspicious that the sponge had been gummed on to the end of the glassrope; but I showed him that the fibres of the glassrope could be seen nearly to the upper edge of the sponge. However, to make sure, we soaked the sponge in the water; and, lo! the two sides of the fan-like body separated, and showed that it had been cut down on one side, opened, the ends of the fibres of the glassrope inserted, and the sponge then glued together with gum on the edges and round the narrow base! The sponge used for this purpose is the *Spongia aculeata* of Esper (Zooph. t. vii. a), or a species very nearly allied to it. It is very probable that more specimens of this kind have been prepared for sale in Europe. This is not like the square pieces of the bark of *Hyalonema*, that were stuck on the ends of the fibres and figured as isolated zoanthoid animals by Professor Wyville Thomson in his account of this genus.

It is a curious question if these artificial specimens are made by the Japanese or by a French dealer in objects of natural history. In both these cases the cement used is gum thickened with starch, just such as is used by the French bird-stuffers for such purposes.

*On unequal Bivalve Shells.* By Dr. J. E. GRAY, F.R.S. &c.

It has been generally believed, and I, think truly, that all equal-valved shells live sunk perpendicularly in the sand, mud, or rocks, attached by a byssus, which allows the water or food to enter on all sides of them, and that the bivalves with unequal valves naturally live lying horizontally on the surface of the rocks, or more or less sunk in the sand, and that the inequality of the valves depends on the permanence of this mode of life, and therefore is greatest in such genera as *Ostrea*, which are fixed to rocks by the lower surface of the under or attached valve. In some species of this genus, for example, the upper valve is so small as to look almost like an operculum. Unfortunately I have had little opportunity of verifying these facts in the genera which have the valves only slightly unequal, as the greater part of my time has been spent in the Museum, and the chief part of my vacations in visiting and examining the various museums of Europe.

It would be very useful if persons living on the coast would verify this theory, more especially as some genera (like *Pandora*) which have very unequal valves are said to live free.

My attention has been called to this fact by observing that Professor